

WB-NT-1

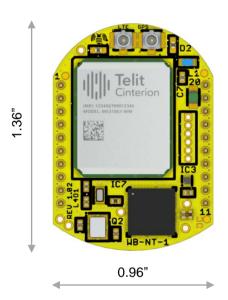
Industrial LTE Cat M1/NB-IoT (NB2) Module

WB-NT-1 is an industrial LTE CAT M1/NB2 module, that is designed for low-data throughput IoT applications and has optimized power consumption with enhanced quality of coverage.

WB-NT-1 uses the brand-new ME310G1 IoT device from Telit® together with a popular Cortex-M0+ 32-bit RISC core microcontroller from ST Micro.

WB-NT-1 is pin compatible with other popular wireless devices and has fully backed by a 3-year warranty, technical support and application assistance from BiPOM Electronics, Inc.





Top View



Rear View

WillowBee Specifications:

- Pin compatible with popular modules
- u.FL Connectors for cellular and GNSS
- RF Shield
- Dual Power option: Battery or DC Power
- 3.5V to 5.5V supply voltage range
- Temperature Range: -40°C to +85°C
- Dimensions 1.36" x 0.96" x 0.36" (34.54 mm x 24.38 mm x 9.14 mm)
- 2-MB Serial Flash
- Configurable 15 I/O Pins
- ADC, SPI, UART, I2C interfaces
- Part number: WB-NT-1

Telit[®] Module Features:

- ME310G1-WW worldwide module
- Both LTE-M1 and NB-IoT (NB2) support
- Low Power for battery operation
- Configurable power output
- Compliant with 3GPP Release 14
- Maximum output power: 21 dBm
- 4G Bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B27, B28, B66, B71, B85. All major worldwide carriers.
- FirstNet support on LTE-M
- GNSS (GPS, GLONASS, Beidou, Galileo)

Microcontroller Features:

- STM32G0B1CEU6N Cortex M0+ core
- Low Power for battery operation
- 144 KB of RAM and 512 KB of Flash memory available to user applications
- Flash memory with protection and securable area
- 12-bit analog inputs, external reference option

USART3 TX (PB2) USART3_RX (PB0) MISO2 (PB6) NRST BOOT USART2 TX (PA2) USART2_RX (PA3) SCK2 (PB8)



ON/OFF (PA0) AIN1 (PA1) GPIO3 (PB5) CS2 (PB9) SDA2 (PB4) SCL2 (PB3) VREF P/AIN15 (PB11) ON/SLEEP (PC13) CTS1/AIN9 (PB1) MOSI2 (PB7)

www.bipom.com



WiPOM

Wireless Point of Monitoring

WiPOM is a software application package that adds sophisticated data logging, remote terminal, and PLClike capabilities to the WB-NT-1 board. WiPOM can run on STM32 family of processors. WiPOM handles all aspects of Industrial IoT applications development, including I/O management, tags, alarms, events, SMS/email handling, MODBUS master and slave capability, modem detection, management and Cloud portal support. WiPOM runs directly on WB-NT-1 board. Coupled with the WiPOM Client running on a Windows PC or on a web server, programming the WB-NT-1 board is reduced to a series of configuration selections to build a complete IoT system. WiPOM takes software out of the equation for faster time to market. Creating remote monitoring and control systems and sensors has not been easier.

